

Secondary Smelting and Alloying of Aluminum: 2002

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2002 Economic Census

Manufacturing

Industry Series



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-- Not applicable for this report.

Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
331314, Secondary smelting and alloying of aluminum	2002.. 127	150	6 071	260 520	4 351	9 419	164 542	753 398	3 039 918	3 814 425	68 354
	2001.. N	N	7 308	258 967	5 504	11 115	171 789	742 090	2 565 895	3 325 045	58 871
	2000.. N	N	7 634	263 449	5 800	11 789	177 705	799 625	2 931 930	3 744 074	113 170
	1999.. N	N	7 380	252 856	5 678	12 069	167 914	803 893	2 792 435	3 577 417	103 742
	1998.. N	N	6 918	237 122	5 391	11 996	161 364	873 707	2 698 716	3 566 237	66 341
	1997.. 87	109	6 614	226 469	5 036	10 930	149 770	796 535	2 799 262	3 595 436	86 449

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
331314, Secondary smelting and alloying of aluminum												
United States	—	150	76	6 071	260 520	4 351	9 419	164 542	753 398	3 039 918	3 814 425	'68 354
California	—	17	8	621	24 665	439	870	14 587	73 418	196 538	267 955	'11 245
Florida	1	5	1	160	6 041	123	246	3 973	6 867	44 000	50 867	'891
Illinois	—	12	5	373	15 452	269	595	9 421	32 057	165 682	196 853	'2 004
Indiana	—	12	6	721	35 979	501	1 106	22 191	96 172	328 008	420 534	'10 787
Michigan	—	11	8	530	22 340	400	940	14 255	90 404	292 408	383 347	'4 952
Ohio	—	10	5	425	18 139	335	772	12 125	57 496	150 949	210 225	'4 294
Pennsylvania	—	6	4	129	5 255	78	177	2 648	16 397	124 738	141 849	'1 196
Tennessee	—	8	8	714	29 429	448	1 012	16 851	101 684	305 627	406 190	'8 355

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
331314, Secondary smelting and alloying of aluminum	
Companies ¹	number.. 127
All establishments ²	number.. 150
Establishments with 1 to 19 employees	number.. 74
Establishments with 20 to 99 employees	number.. 59
Establishments with 100 employees or more	number.. 17
All employees ³	number.. 6 071
Total compensation	\$1,000.. 336 929
Annual payroll	\$1,000.. 260 520
Total fringe benefits	\$1,000.. 76 409
Production workers, average for year	number.. 4 351
Production workers on March 12	number.. 4 415
Production workers on May 12	number.. 4 417
Production workers on August 12	number.. 4 288
Production workers on November 12	number.. 4 285
Production worker hours	1,000.. 9 419
Production worker wages	\$1,000.. 164 542
Total cost of materials	\$1,000.. 3 039 918
Materials, parts, containers, packaging, etc., used	\$1,000.. 2 663 295
Resales	\$1,000.. 219 946
Purchased fuels	\$1,000.. 80 166
Purchased electricity	\$1,000.. 50 168
Contract work	\$1,000.. 26 343
Quantity of electricity purchased for heat and power	1,000 kWh.. 1 349 188
Quantity of electricity generated less sold for heat and power	1,000 kWh.. S
Total value of shipments	\$1,000.. 3 814 425
Primary products value of shipments	\$1,000.. 3 419 577
Secondary products value of shipments	\$1,000.. 48 180
Total miscellaneous receipts	\$1,000.. 346 668
Value of resales	\$1,000.. 230 178
Contract receipts	\$1,000.. 113 353
Other miscellaneous receipts	\$1,000.. 3 137
Primary products specialization ratio	percent.. 99
Value of primary products shipments made in all industries	\$1,000.. 3 499 330
Value of primary products shipments made in this industry	\$1,000.. 3 419 577
Value of primary products shipments made in other industries	\$1,000.. 79 753
Coverage ratio	percent.. 98
Value added	\$1,000.. 753 398
Total inventories, beginning of year	\$1,000.. 287 663
Finished goods inventories	\$1,000.. 143 213
Work-in-process inventories	\$1,000.. 32 862
Materials and supplies inventories	\$1,000.. 111 588
Total inventories, end of year	\$1,000.. 255 965
Finished goods inventories	\$1,000.. 134 837
Work-in-process inventories	\$1,000.. 20 129
Materials and supplies inventories	\$1,000.. 100 999
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. 1 156 987
Total capital expenditures (new and used)	\$1,000.. '68 354
Buildings and other structures (new and used)	\$1,000.. '8 278
Machinery and equipment (new and used)	\$1,000.. '60 076
Automobiles, trucks, etc., for highway use	\$1,000.. '1 148
Computers and peripheral data processing equipment	\$1,000.. '3 597
All other expenditures for machinery and equipment	\$1,000.. '55 331
Total retirements	\$1,000.. '43 447
Gross value of depreciable assets at end of year	\$1,000.. '1 181 894
Depreciation charges during year	\$1,000.. '74 918
Total rental payments	\$1,000.. 24 016
Buildings and other structures	\$1,000.. 8 800
Machinery and equipment	\$1,000.. 15 216
Total other expenses ⁴	\$1,000.. 131 293
Response coverage ratio ⁵	percent.. 81
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 37 905
Communications services ⁴	\$1,000.. 1 538
Legal services ⁴	\$1,000.. 2 861
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 737
Advertising and promotional services ⁴	\$1,000.. 349
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 380
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 11 437
Management consulting and administrative services ⁴	\$1,000.. 3 861
Taxes and license fees ⁴	\$1,000.. 3 805
All other expenses ⁴	\$1,000.. 68 420

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
331314, Secondary smelting and alloying of aluminum											
All establishments	—	150	6 071	260 520	4 351	9 419	164 542	753 398	3 039 918	3 814 425	'68 354
Establishments with—											
1 to 4 employees	9	43	c	D	D	D	D	D	D	D	D
5 to 9 employees	5	15	97	4 062	75	154	2 847	5 265	29 627	34 949	'648
10 to 19 employees	3	16	225	9 495	180	384	6 562	29 784	76 021	105 738	'1 439
20 to 49 employees	—	30	1 021	40 334	756	1 645	25 499	124 616	379 617	511 641	'9 401
50 to 99 employees	—	29	2 075	82 247	1 472	3 141	48 794	232 185	1 098 270	1 334 748	'28 749
100 to 249 employees	—	16	2 260	101 134	1 619	3 527	67 514	309 961	1 269 779	1 590 747	'22 164
250 to 499 employees	—	1	e	D	D	D	D	D	D	D	D
500 to 999 employees	—	—	—	—	—	—	—	—	—	—	—
1,000 to 2,499 employees	—	—	—	—	—	—	—	—	—	—	—
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	4	49	276	10 919	211	443	7 135	15 978	101 836	117 787	'2 063

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
331314	Secondary smelting and alloying of aluminum.....	150	6 071	260 520	4 351	9 419	164 542	753 398	3 039 918	3 814 425	'68 354
3313142	Aluminum ingot, including billet, made by secondary smelters.....	65	4 505	191 259	3 273	7 185	121 695	631 596	2 540 550	3 166 423	'48 608
3313145	Aluminum and aluminum-base alloy powders, paste, and flakes from purchased aluminum.....	19	1 012	48 345	673	1 379	29 692	91 033	289 102	406 225	'15 927

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. **Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
331314	Secondary smelting and alloying of aluminum	2002.. N 1997.. N	X X	X X	3 499 330 3 357 627
3313142	Aluminum ingot, including billet, made by secondary smelters	2002.. N 1997.. N	X X	X X	2 952 464 N
33131421	Aluminum ingot, including billet, made by secondary smelters	2002.. N 1997.. N	X X	X X	2 952 464 N
3313142100	Aluminum ingot, including billet, made by secondary smelters ¹	1,000 s tons. 2002.. 50 1997.. N	S N	S N	2 952 464 N
3313145	Aluminum and aluminum-base alloy powders, paste, and flakes from purchased aluminum	2002.. N 1997.. N	X X	X X	381 083 194 538
33131451	Aluminum and aluminum-base alloy powders, paste, and flakes from purchased aluminum	2002.. N 1997.. N	X X	X X	381 083 194 538
3313145100	Aluminum and aluminum-base alloy powders, paste, and flakes from purchased aluminum	mil lb. 2002.. 20 1997.. 16	X X	S S	381 083 194 538
331314W	Secondary smelting and alloying of aluminum, nsk, total	2002.. N 1997.. N	X X	X X	165 783 73 017
331314WY	Secondary smelting and alloying of aluminum, nsk, total	2002.. N 1997.. N	X X	X X	165 783 73 017
331314WYWW	Secondary smelting and alloying of aluminum, nsk, for nonadministrative-record establishments	2002.. N 1997.. N	X X	X X	89 681 73 017
331314WYWY	Secondary smelting and alloying of aluminum, nsk, for administrative-record establishments	2002.. N 1997.. N	X X	X X	76 102 —

¹This product code is primary to more than one industry. See industries 331312 and 331319, product codes 3313122100 and 331319D100.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p—10 to 19 percent estimated; q—20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. Product Class Shipments for Selected States: 2002 and 1997

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3313142	Aluminum ingot, including billet, made by secondary smelters	
	United States..... 2002..	2 952 464
	..... 1997..	N
	California 2002..	199 497
	..... 1997..	N
	Illinois 2002..	134 262
	..... 1997..	N
	Indiana 2002..	348 982
	..... 1997..	N
	Michigan..... 2002..	304 245
	..... 1997..	N
3313145	Ohio 2002..	161 768
	..... 1997..	N
	Tennessee..... 2002..	389 148
	..... 1997..	N
	Aluminum and aluminum-base alloy powders, paste, and flakes from purchased aluminum	
	United States..... 2002..	381 083
	..... 1997..	194 538
	California 2002..	18 106
	..... 1997..	N

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
331314	Secondary smelting and alloying of aluminum		
00900001	Total materials .....2002..	X	2 663 295
	.....1997..	X	2 613 093
33131209	Aluminum and aluminum-base alloy ingot.....1,000 s tons..2002..	S	590 837
	.....1997..	61 590.0	284 026
33100009	All other aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	88 595
	.....1997..	X	166 064
00190020	Aluminum and aluminum-base alloy scrap (excluding home scrap) .....1,000 s tons..2002..	q1 683.0	1 641 264
	.....1997..	1 290.7	1 678 866
00190052	All other nonferrous metal and metal-base alloy scrap .....2002..	X	11 373
	.....1997..	X	261 695
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	210 267
	.....1997..	X	221 739
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	120 959
	.....1997..	X	703

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.